



BRAWIJAYA UNIVERSITY

FACULTY OF ENGINEERING

DEPARTMENT OF URBAN AND REGIONAL PLANNING / MASTER STUDY PROGRAM (S2)

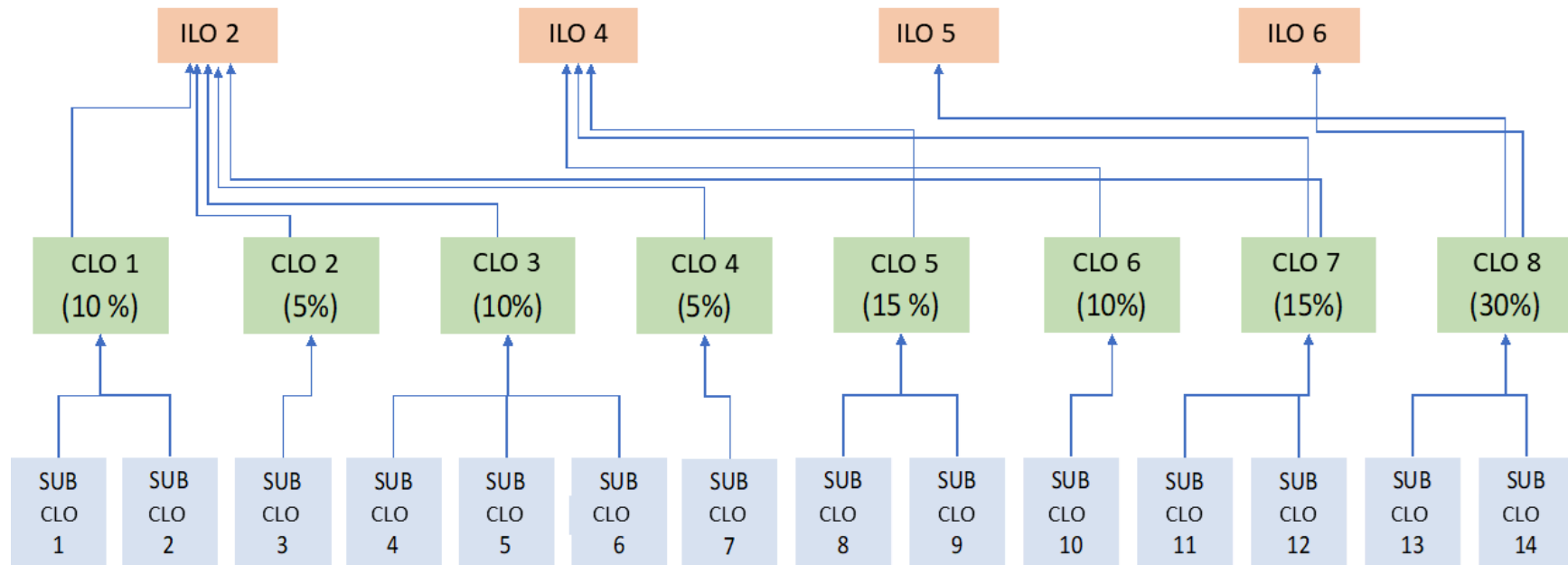
SEMESTER LEARNING PLAN

SUBJECT		CODE	SUBJECT SCOPE	WEIGHT (credits)	SEMESTER	Date of Preparation
Research Methods and Scientific Writing		TKW 82102	Urban and Regional Planning	3	odd	June 15, 2023
AUTHORIZATION		RPS (SEMESTER LEARNING PLAN) Developer Lecturer	Subject Coordinator		Head of Study Program	
-		Imma Widyawati Agustin Septiana Hariyani	Imma Widyawati Agustin		Christia Meidiana	
Learning Outcomes	ILO					
	ILO 2	Able to evaluate theories in the process of planning and development of regions and cities in the field of regional and urban planning specialization;				
	ILO 4	Able to use and select technology application methods in the field of regional and urban planning and development specialization				
	ILO 5	Able to formulate problem solving in the field of regional and urban planning and development by utilizing other fields of science in an interdisciplinary or multidisciplinary manner, and by taking into account physical spatial, economic, socio-cultural, environmental, and institutional factors.				
	ILO 6	Able to compile the synthesis of research, thoughts and ideas carried out for the development of science and technology in the field of regional and urban planning and development and publish them both nationally and internationally.				
	CLO					

	CLO 1	Explain the scope of research at the bachelor, master, and doctoral levels; explain the research process in the field of PWK. Explain, and use paradigms in the research process
	CLO 2	Explain and use quantitative, qualitative & experimental research according to the research problem.
	CLO 3	Able to explain, and analyze the theoretical basis, hypothesis framework in accordance with existing problems. Able to explain the synthesis of theories from literature and previous research
	CLO 4	Able to explain the research conceptual framework according to the research problem
	CLO 5	Able to explain the selected variables, sampling techniques, and able to analyze sampling techniques in accordance with the formulation of research problems. Able to explain data search methods and choose the right data search method. Able to explain and choose analysis methods to answer research problems.
	CLO 6	Able to explain and create an analytical framework and survey design for research
	CLO 7	Able to explain the formulation of qualitative research problems, relevant data collection, and explain sampling in qualitative research, and qualitative research analysis methods.
	CLO 8	Able to understand, create writing by following writing procedures in scientific writing
	SUB CLO	
	SCLO 1	Explain the scope of research at bachelor's, master's, and doctoral levels
	SCLO 2	Explain, and use paradigms in the research process.
	SCLO 3	explain and use quantitative, qualitative, and experimental research according to the research problem.
	SCLO 4	Able to explain, and analyze the theoretical basis, hypothesis framework in accordance with existing problems.
	SCLO 5	Able to explain the synthesis of theories from literature and previous research.
	SCLO 6	Able to explain the research conceptual framework according to the research problem
	SCLO 7	Able to explain the selected variables, sampling techniques and able to analyze sampling techniques that are in accordance with the formulation of research problems.
	SCLO 8	Able to explain data search methods and choose the right data search method
	SCLO 9	Able to explain and choose analytical methods to answer research problems
	SCLO 10	Able to explain and create an analytical framework and survey design for research
	SCLO 11	Able to explain the formulation of qualitative research problems, relevant data collection, and explain sampling, and qualitative research analysis methods.
	SCLO 12	Able to explain sampling in qualitative research, and qualitative research analysis methods.
	SCLO 13	Able to explain and make a thesis research proposal.

	SCLO 14	Able to explain and make scientific writing
Brief description of the course	The Research Methodology and Scientific Writing course is a course given in the second semester and forms the basis for the Thesis course.	
Learning Materials / Subjects	1. Scope of research at bachelor, master, and doctoral levels; explain the research process in the field of PWK. Paradigm in the research process 2. Quantitative, qualitative & experimental research 3. Theoretical foundation, hypothesis framework, synthesis of theory, synthesis of previous research 4. Research conceptual framework 5. Variable, sampling technique 6. Data search method 7. Analytical method, analytical framework, survey design 8. Qualitative research, data collection, sampling, and qualitative research analysis methods 9. Writing scientific papers	
Library	Main	
	1. Fred N. Kerlinger. 2004. Asas Penelitian Behavioral. UGM Press. 2. O'Leary, Zina. 2004. The Essential Guide to Doing Research. Sage Publications 3. Saris, Willem. 2007. Design, Evaluation, and Analysis of Questionnaires for Survey Research. Wiley - Interscience. 4. Sugiyono. 2014. Metode Penelitian Kuantitatif, Kualitatif, dan R & D. Bandung: Alfabeta, CV. 5. Smith, The experiential learning cycle, (Jakarta: Cwis.us.edu/dept/sba/ resources/elc/exp.html.com, 2008. 6. Panduan Penulisan Tesis dan Disertasi. Fakultas Teknik Universitas Brawijaya Departemen Pendidikan Nasional. Malang	
	Supporters	
	1. Suryana. (2010). Metodologi Penelitian Model Praktis Penelitian Kuantitatif dan Kualitatif. http://file.upi.edu/Direktori/FPEB/PRODI._MANAJEMEN_FPEB/196006021986011-SURYANA/FILE__7.pdf.	
Learning Media	Software	Hardware
	SOFTWARE: VLM2, GMEET, ZOOM	LCD Projector, Laptop
Team Teaching	Class R1	Class R2
	1. Dr. Septiana Hariyani, ST, MT. 2. Dr. Wara Indira Rukmi, ST, MT. 3. Imma Widyawati Agustin, ST, MT, PhD.	1. Dr. Septiana Hariyani, ST, MT. 2. Johanes Parlindungan, ST, MT, PhD. 3. Imma Widyawati Agustin, ST, MT, PhD.
Course Requirements	-	

Diagram of relationship/percentage of OBE/KKNI SLOs/ILPs with CLO/CLOs



Weight Mapping of SLO - CLO

	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5	SLO 6	SLO 7	SLO 8	Total
CLO 1	0	1	0	0	0	0	0	0	1
CLO 2	0	1	0	0	0	0	0	0	1
CLO 3	0	1	0	0	0	0	0	0	1
CLO 4	0	1	0	0	0	0	0	0	1
CLO 5	0	0	0	1	0	0	0	0	1
CLO 6	0	0	0	1	0	0	0	0	1
CLO 7	0	0.5	0	0.5	0	0	0	0	1
CLO 8	0	0	0	0	0.5	0.5	0	0	1

Relationship between SLO and CLO / sub CLO and assessment

SLOs and IK SLOs imposed on the course of Research Methods and Scientific Writing				CLO				Media assessment and its contribution to MK competency scores		
ILO	SLO Statement	IK-ILO	IK-ILO Statement	CLO	CLO Statement	CLO Weight	Assessment Media	TASK	Mid-Exam	Final Exam
2	Able to evaluate theories in the process of planning and development of regions and cities in the field of regional and urban planning specialization;	a	able to evaluate theories in the process of planning and development of regions and cities in the spatial and environmental fields	1	Explain the scope of research at the bachelor, master, and doctoral levels; explain the research process in the field of PWK. Explain, and use paradigms in the research process	10				
				2	Explain and use quantitative, qualitative & experimental research according to the research problem.	5				
				3	Able to explain, and analyze the theoretical basis, hypothesis framework by existing problems. Able to explain the synthesis of theories from literature and previous research	10				
				4	Able to explain the research conceptual framework according to the research problem	5				

SLOs and IK SLOs imposed on the course of Research Methods and Scientific Writing				CLO				Media assessment and its contribution to MK competency scores		
ILO	SLO Statement	IK-ILO	IK-ILO Statement	CLO	CLO Statement	CLO Weight	Assessment Media	TASK	Mid-Exam	Final Exam
4	Able to use and select technology application methods in the field of regional and urban planning and development specialization	a	Able to use technology application methods in the field of regional and urban planning and development specialization	5	Able to explain the selected variables, and sampling techniques, and able to analyze sampling techniques by the formulation of research problems. Able to explain data search methods and choose the right data search method. Able to explain and choose analysis methods to answer research problems.	15				
				6	Able to explain and create an analytical framework and survey design for research	10				
5	Able to formulate problem solving in the field of regional and urban planning and development by utilizing other fields of science in an interdisciplinary or multidisciplinary manner, and by taking into account physical spatial, economic, socio-cultural, environmental, and institutional factors.	a	Formulate solutions to problems in the physical spatial and environmental fields based on theoretical concepts, systems, processes, and methods of appropriate regional and urban planning and development;	7	Able to explain the formulation of qualitative research problems, relevant data collection, and explain sampling in qualitative research, and qualitative research analysis methods.	15				
6	Able to compile the synthesis of research, thoughts and ideas carried out for the development of science and technology in the field of regional and urban planning and development and publish them both nationally and internationally.	b	Able to compile scientific work in the form of research or planning results and publish it in the form of reports, seminars, journals (national or international), posters and in social media.	8	Able to understand, create writing by following writing procedures in scientific writing	30				
Total						100%	-	50%	40%	10%

Recapitulation of Percentage of SLO and CLO Relationship

CLO	DESCRIPTION	Tasks	MID-EXAM	FINAL EXAM	
CLO 1	Explain the scope of research at the bachelor, master, and doctoral levels; explain the research process in the field of URP. Explain, and use paradigms in the research process	20%	5%		25%
CLO 2	Explain and use quantitative, qualitative & experimental research according to the research problem.	35%	10%		45%
CLO 3	Able to explain, and analyze the theoretical basis, and hypothesis framework by existing problems. Able to explain the synthesis of theories from literature and previous research	24%		6%	30%
CLO 4	Able to explain the research conceptual framework according to the research problem				
CLO 5	Able to explain the selected variables, and sampling techniques, and able to analyze sampling techniques by the formulation of research problems. Able to explain data search methods and choose the right data search method. Able to explain and choose analysis methods to answer research problems.				
CLO 6	Able to explain and create an analytical framework and survey design for research				
CLO 7	Able to explain the formulation of qualitative research problems, relevant data collection, and explain sampling in qualitative research, and qualitative research analysis methods.				
CLO 8	Able to understand, and create writing by following writing procedures in scientific writing				
Final Score =		79%	15%	6%	100%

Description: Filled in yellow

Recapitulation of Percentage Relationship between CLO and Assessment

ILO	Performance Indicators	CLO	Weight (%)	Quiz 1	Quiz 2	Task 1	Task 2	Practicum	MID-EXAM	FINAL EXAM	Weight
1 & 8	1a, 8a	CLO 1	5%	5%							15%
			10%						10%		
	1b, 8a	CLO 2	10%			10%					20%
			10%						10%		

ILO	Performance Indicators	CLO	Weight (%)	Quiz 1	Quiz 2	Task 1	Task 2	Practicum	MID-EXAM	FINAL EXAM	Weight
3 & 8	3a, 8a	CLO 3	40%								20%
	3b, 8a									20%	
	3c, 8a	CLO 4	10%				20%				45%
			15%							25%	
				5%		10%	20%		20%	25%	100%

Semester Learning Plan

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
1 (SH)	SUB CLO-1: Explain the scope of research at bachelor's, master's, and doctoral levels	Able to evaluate research at bachelor, master, and doctoral levels	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. Assessment: Test: MID-EXAM essay questions Non Test:	• Lecture. Lecture • Discussion • Task 1: Case Study	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5
2 (SH)	SUB CLO-2: Explain, and use paradigms in the research process	Able to evaluate paradigms in the research process	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
			methods and clear sources, by the description of the lecture explanation. Assessment: Test: MID-EXAM essay questions Non Test: -				
3 (SH)	SUB CLO-3: explain and use quantitative, qualitative, and experimental research according to the research problem.	Able to evaluate quantitative, leatherette, and experimental research by research problems	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical methods and clear sources, by the description of the lecture explanation.	● Lecture. Lecture ● Discussion ● Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
			Assessment: Test: MID-EXAM essay questions Non Test: -				
4 (SH)	SUB CLO-4: Able to explain, and analyze the theoretical basis, hypothesis framework in accordance with existing problems.	Able to decide the theoretical basis, and hypothesis framework in accordance with the existing problems	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical methods and clear sources, in accordance with the description of the lecture explanation. Assessment: Test: MID-EXAM essay questions Non Test: -	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
5 (SH)	SUB CLO-5: Able to explain the synthesis of theories from literature and previous research	Accuracy in explaining the synthesis of theories from literature and previous research.	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical methods and clear sources, by the description of the lecture explanation. Assessment: Test: MID-EXAM essay questions Non Test: -	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5
6 (SH)	SUB CLO-6: Able to explain the research conceptual framework according	Accuracy in explaining research concepts according to research problems	Criteria: 1. Clarity of discussion and description according to	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes		5

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
	to the research problem		the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical methods and clear sources, in accordance with the description of the lecture explanation. Assessment: Test: MID-EXAM essay questions Non Test: -		Assignments and self-study: 60 minutes + 50 Minutes		
7 (IWA)	SUB CLO-7: Able to explain the selected variables, and sampling techniques and able to analyze sampling techniques that are in accordance with the formulation of research problems.	Accuracy in explaining the selected variables, sampling techniques and being able to analyze sampling techniques that are by the formulation of	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
		research problems.	other related sources. 2. Accuracy in the use of analytical methods and clear sources, in accordance with the description of the lecture explanation. Assessment: Test: MID-EXAM essay questions Non Test: -				
8	MID-EXAM						5
9 (IWA)	SUB CLO-9: Able to explain the research approach and Able to analyze what approach is suitable for the research theme	Accuracy in explaining the research approach and Able to explain what approach is suitable for the research theme	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. 2. Accuracy in the use of	● Lecture. Lecture ● Discussion ● Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
			analytical methods and clear sources, by the description of the lecture explanation. Assessment: Test: MID-EXAM essay questions Non Test: -				
10 (IWA)	SUB CLO-10: Able to explain and choose analytical methods to answer research problems	Accuracy in explaining the selection of analytical methods to answer research problems	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical methods and clear sources, by the description of	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5

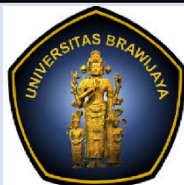
Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
			the lecture explanation. Assessment: Test: UAS essay questions Non Test: -				
11 (IWA)	SUB CLO-11: Able to explain and create an analytical framework and survey design for research	Accuracy in explaining the analytical framework and survey design for research.	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical methods and clear sources, by the description of the lecture explanation. Assessment: Test: Final Exam essay questions Non Test: -	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		10

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
12 (WIR) (JP)	SUB CLO-12: Able to explain the formulation of qualitative research problems, relevant data collection, and explain sampling, and qualitative research analysis methods.	Accuracy in explaining the formulation of qualitative research problems, collecting relevant data, and explaining sampling, and qualitative research analysis methods.	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical methods and clear sources, by the description of the lecture explanation. Assessment: Test: Final Exam essay questions Non Test: -	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		5
13 (WIR) (JP)	SUB CLO-13: Able to explain sampling in qualitative research and qualitative	Accuracy in explaining about sampling in qualitative research, and	Criteria: 1. Clarity of discussion and description according to	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes		10

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
	research analysis methods.	qualitative research analysis methods.	the explanation of lecture material and other related sources. 2. Accuracy in the use of analytical methods and clear sources, by the description of the lecture explanation. Assessment: Test: Final Exam essay questions Non Test: -		Assignments and self-study: 60 minutes + 50 Minutes		
14 (IWA)	SUB CLO-14: Able to explain and make a thesis research proposal.	Accuracy in explaining making a thesis research proposal	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources.	• Lecture. • Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		10

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
			2. Accuracy in the use of analytical methods and clear sources, in accordance with the description of the lecture explanation. Assessment: Test: Final Exam essay questions Non Test: -				
15 (IWA)	SUB CLO-15: Able to explain and make scientific writing	Accuracy in explaining scientific work	Criteria: 1. Clarity of discussion and description according to the explanation of lecture material and other related sources. Assessment: Test: Final Exam essay questions Non Test: -	• Lecture. Lecture • Discussion • Tasks: -	Lecture: 2x 50 minutes Discussion: 50 minutes Assignments and self-study: 60 minutes + 50 Minutes		10

Week	Sub-CLO (as expected end capability)	Indicator	Criteria & Form of Assessment	Learning Methods (Lecture / Assignment / other forms of learning)	Time (Duration)	Learning Material / Study Material [Literature]	Assessment Weight (%)
16	Final Exam Able to make an initial proposal for thesis research						10



BRAWIJAYA UNIVERSITY
FACULTY OF ENGINEERING
URP DEPARTMENT / URP MASTER STUDY PROGRAM

STUDENT ASSIGNMENT PLAN

SUBJECT	RESEARCH METHODS AND SCIENTIFIC WRITING				
CODE	TKW 82102	credits	3	SEMESTER	2
INSTRUCTOR	Dr. Septiana Hariyani, ST, MT.				
TASK FORM		TASK TIME			
Individuals		170 minutes/week/semester			
TASK TITLE					
Draft Thesis Proposal					
SUBCOURSE LEARNING OUTCOMES					
Draft a thesis proposal according to the chosen field (Sub CLO 5,6, and 7)					
TASK DESCRIPTION					
Each student can make an initial draft of a complete thesis research plan according to the rules of scientific writing.					
ASSIGNMENT METHOD					
1. Independent: students understand the assignments given, and conduct literature reviews from journals that are on the research theme that will be used as their thesis.					
FORM AND FORMAT OF OUTPUT					
a. Objective: Thesis proposal draft					
b. Form of Output:					
1. draft a thesis proposal, containing CHAPTER 1 (background, research urgency, problem identification, research problems, objectives, the scope of the area, scope of material, framework of thought; CHAPTER 2 literature review to answer research questions, similar previous studies, theoretical framework; and CHAPTER 3 conceptual framework).					
2. Chapter 4 outlines the research method starting from research variables, sampling, analytical methods that will be used to answer the research questions in Chapter 1, analytical framework, survey design, and survey equipment (questionnaires, interview sheets, observation sheets).					
3. Collected in print and file form, namely: No.1 above is a Stage 1 Assignment for MID-EXAM, and No. 2 above is a Stage 2 Assignment for UAS; Both Stage 1 and Stage 2 assignments: have a complete draft: summary, table of contents, table of tables, list of images, bibliography, ppt file.					
c. Output Format:					

• Report and presentation file	
INDICATORS, CRITERIA, AND ASSESSMENT WEIGHT	
1. Completeness of business plan components point a to e = 30% 2. Completeness of business plan components point f to h = 20%	
IMPLEMENTATION SCHEDULE	
Completeness of component No.1 (output form 1)	MID-EXAM week
Completeness of component No.1 (output form 2)	Last week of classes
Full proposal and presentation	FINAL-EXAM week
OTHER	
LIST OF REFERENCES: in the RPS (Semester Learning Plan)	